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10/030,099	01/16/2002	Keizaburo Matsumoto	020043	5715

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EXAMINER

DICUS, TAMRA

ART UNIT PAPER NUMBER

1774

DATE MAILED: 05/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/030,099

Applicant(s)

MATSUMOTO, KEIZABURO

Examiner

Tamra L. Dicus

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

The 112 rejections are withdrawn due to the amendment. The double patenting and 102 rejection is withdrawn due to Applicant's arguments.

#### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 recites the fixed information is on the receiving layer and the receiving layer is on the paper, whereas dependent claim 10 recites the reverse e.g. receiving layer on fixed information. The order of claim 10 is not consistent with the claim it depends from.

#### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6, 10, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,829,700 to Phillips in view USPN 6,214,449 to Otani et al.

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3. Phillips teaches a greeting card (printed matter) comprising a paper sheet 12 of an ink jet printed with a color ink jet printer (col. 1, line 45-46) (variable information is formed). See col. 2, line 29. The greeting card can be preprinted lithographically with any desired theme (col. 3, lines 15-20) (print film containing fixed information printed). Further, that a print film is printed by various printing methods (lithographic, intaglio, relief of instant claim 1 and ink jet printing of instant claim 9) is a process limitation in a product claim and afforded little patentable weight. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” *In re Thorpe*, 777 F.2d 695, 698. Thus, Applicant’s article and the prior art article is the same.

4. Phillips does not teach one or two receiving layers comprising an ink-absorbing and ink-fixing resin as per instant claims 1-5 nor the additional ink over the receiving layer(s) as claim 10 recites. Phillips as cited above, already teaches lithographic ink print on paper (claim 10).

Otani teaches coating (claims 10 and 12) two ink receiving layers (col. 3, lines 25-28) containing cellulose, polyvinyl alcohol (col. 4, lines 14-25) (ink-absorbing additive) and cationic dye fixing agents (col. 4, lines 27-31). Further additives include fillers of UV absorbents, pigments, and fluorescent dyes (col. 4, lines 33-37). Otani teaches water based ink jet ink is recorded on the paper having ink receiving layers to form an image thereon (col. 1, lines 1-10).

It would have been obvious to one of ordinary skill in the art to modify the greeting card of Phillips to further include one or two receiving layers comprising cellulose, fillers, and ink-

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fixing agents because Otani teaches the inclusion of said layers provides ink absorbency, high image density, high surface strength and reduction in cost can be attained (col. 3, lines 24-29). The inclusion of aforesaid ink-absorbing, ink-fixing, and fillers are conventionally added to effect the image density (col. 4, lines 15-68 of Otani). Ink is on the paper having ink-receiving layers to form an image. Thus, the combination results in the same instant invention.

Further to claims 10 and 12, Phillips and Otani do not teach the methods of an in-line system or anilox rollers for forming the layers. However, the processes of forming the layers are process limitation in a product claim and afforded little patentable weight.

Claims 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,829,700 to Phillips in view USPN 6,214,449 to Otani et al., and further in view of USPN 6,708,612 to Schmid.

Phillips and Otani, relied upon above, do not teach the use of an in-line system or anilox rollers as per instant claims 10 and 12. Schmid teaches a printing machine for printing sheets receiving ink using an in-line operation, ink jet printers, and anilox rollers (col. 2, lines 35-40, 60-65, and col. 4, lines 23-25). Schmid discovered this machine allows two inks to be printed from two different printing machines at the same time (col. 4, lines 50-55). It would have been obvious to one of ordinary skill in the art to modify the combination of Phillips and Otani because Schmid teaches the use of ink jet printers and anilox rollers in an in-line system for the purpose of printing paper successively with different colors (col. 3, lines 55-56 and col. 4, lines 51-55 of Schmid).

Claims 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,829,700 to Phillips in view of USPN 6,214,449 to Otani et al., and further in view of USPN 6,830,329 to Iwata.

Phillips and Otani, relied upon above, do not teach the use of an in-line system or anilox and rubber rollers as per instant claims 10 and 12.

Iwata teaches an image was formed on the obtained recording medium by means of an ink-jet printer thereafter, the ink-receiving layer processed through a steel and rubber roll in order to bond an ink-receiving layer to produce a finished printed article. While Iwata does not explicitly teach an “anilox” roll, the steel roll is functionally equivalent to an anilox roll, as both are capable of processing ink and ink-receiving layers.

It would have been obvious to one of ordinary skill in the art to have modified the combination to form ink-receiving layers via two rolls, namely anilox and rubber, because Iwata teaches it is known to produce ink-receiving layers through such rolls in order to bond an ink-receiving layer to produce a finished printed article (col. 3, lines 1-21 and col. 8, lines 34-35).

#### ***Allowable Subject Matter***

5. Claims 7-8 and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The applied prior art does not teach a receiving layer comprising a layer adjoining the printing ink film of the oil-based ink and containing different ingredients, wherein the layer adjoining the printing ink film of the oil-based ink contains a film-

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forming acrylic resin obtained by emulsion polymerizing monomers containing 15% by weight or more of a methacrylic ester compound containing an alkyl group having 8 to 18 carbon atoms as recited in instant claims 7 and 11, wherein instant claim 11 is directed to a method for producing printed matter according to claim 7, or printed matter as instant claim 6 recites having a coating agent further containing 1 to 8% by weight of at least one film forming-improving agent selected from the group recited in claim 8.

***Response to Arguments***

Applicant's arguments filed 02-1-05 have been fully considered but they are not persuasive. Applicant argues Philips involves many choices and simple selection of a paper would not lead to the specific combination. The Applicant claims paper and Philips teaches paper throughout the patent, as Applicant noted "paper" sheet 12 at col. 2, lines 16-17.

Applicant argues Philips does not explicitly disclose an ink jet ink-receiving layer. The Examiner agrees and this argument is moot. The Examiner has thus withdrawn the 102 and introduced the 103 to teach Otani providing the ink receiving layers.

Applicant argues that stickers are printed on the receiving layer by lithography printing but has not considered the card stock is also printed by lithography printing as taught by Philips at col. 2, lines 15-17 and col. 3, lines 19-21. The card of Philips contains preprinted lithographic printing containing oil-based ink inherently and additionally prints on the pre-printed card with ink jet ink (col. 1, lines 45-47 and col. 2, lines 50-56) to personalize the card.

Applicant argues it is impossible to form a printed image on the receiving layer for water based ink jet ink by lithographic printing using oil based ink, but has not shown submitted evidence to show this. Further, it stands that Philips already teaches it is very possible to print

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both types on paper. Otani teaches it is known to add receiving layers on paper to attract ink better and thus improves ink absorption as previously shown. Thus, it would have been obvious to one having skill in the art to include ink receiving layers on paper between ink and paper to improve ink absorption. The combination provides for the same instantly claimed invention.

Applicant argues the structure side-by-side relationship or forming structure is not taught. The combination of Philips and Otani teach the claimed structure.

Applicant argues that Otani does not provide a suggestion for the combination. However, Philips employs paper and inks on paper. Otani teaches ink-receiving layers are on paper to attract ink and thus improves ink absorption, which provides suggestion for the combination. Thus the combination would result in the claimed invention, structural and materially.

Applicant argues claim 10 over Schmid to not teaching fixed information is printed first and then the receiving layer is formed. However, this is a confusing allegation as claim 1 states the fixed information is on the receiving layer and the receiving layer is on the paper, whereas dependent claim 10 recites the reverse e.g. receiving layer on fixed information. Thus, the introduction of a 112 2<sup>nd</sup> paragraph is needed. Additionally claims to an ink receiving layer produced by claim 10 to form a receiving layer on fixed information and ink on a receiving layer is now included in the obviousness rejection of Philips in view of Otani as Otani teaches applying ink and ink receiving layers on paper. Further how the receiver layer(s) are formed is a process limitation and Schmid was only used to address one option, using the in-line system. To further address this argument, Iwata is also used to show it is known to form said layers using the same and functionally equivalent anilox and rubber rolls.



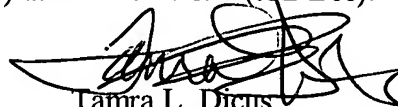
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**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamra L. Dicus whose telephone number is 571-272-1519. The examiner can normally be reached on Monday-Friday, 7:00-4:30 p.m., alternate Fridays.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tamra L. Dicus  
Examiner  
Art Unit 1774

May 9, 2005



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